



JOINT IED DEFEAT ORGANIZATION NEWS STORY



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Study: Greater chance of genital injuries when pelvic protection systems aren't worn

By Staci George
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WASHINGTON, D.C. — A recent study conducted by the Army Office of the Surgeon General compared groin injuries among soldiers wearing pelvic protective systems and those who had not worn them at the time of an IED blast.

In 2011, JIEDDO funded and fielded 165,000 Tier 1 and 45,000 Tier 2 protective garments to troops in Afghanistan in three and a half months, delivering them on time. Tier 1, the undergarment, is worn next to the skin to reduce penetrations of dirt and fine debris. Tier 2, the over garment, is worn over the Army combat uniform pants to reduce penetrations of fragments and larger debris.

The research, compiled by the Operations Research and Systems Analysis Division of Combined Joint Task Force Paladin, shows that those who do not wear pelvic protective systems are at a higher risk of genitourinary injuries than those who wear PPS. The study included 61 warfighters in the control group who had not worn the PPS and suffered one or more lower extremities amputation from dismounted IED blast between Feb. 1, 2010, and Feb. 28, 2011.

Sixty-three warfighters in the experimental group confirmed wearing the PPS and suffered one or more lower extremities amputation from dismounted IED blast between Feb. 1, 2011, and Feb. 28, 2012.

The study found that without the protective undergarments, there's a 72 percent chance of genital injuries.

Although the Joint IED Defeat Organization did not conduct or fund the study, it is one way to keep track of what is going on in the field and influence future developments of protective garments.

“JIEDDO is trying to measure the level of impact protective undergarments and over garments are having,” said Maj. Daniel Hilliker, a JIEDDO counter-IED program integrator.

There are about 10 types of undergarments and over garments undergoing trials in Afghanistan and Iraq. Reports from the field indicate all have satisfactory performance where protection and injury prevention is concerned, but most are uncomfortable to wear.

“Both JIEDDO and the Army are looking for ways to improve the garments,” said Matt Way, another JIEDDO program integrator.

These improvements include a lighter, better-fitting and more comfortable fabric that still provides the protective qualities.

Lt. Gen. Michael D. Barbero, JIEDDO’s director, is also interested in the future advancements in the pelvic protection systems, said Maj. Hilliker.

Studies such as this one provide anecdotal evidence that these garments are effective, but are not yet the silver-bullet solution, he said.

The study listed a number of major injuries and compared them to PPS wearers and non-wearers. Twenty-one men wearing PPS suffered scrotal rupture, whereas 34 men without PPS suffered scrotal rupture. In another statistic, only two men wearing PPS suffered testicular hematoma, whereas 13 men without PPS suffered from it.

The study noted that data collection to assess the effectiveness of the PPS will be an on-going process. Future studies will also look at other outcomes such as infection rate and length of convalescence and effectiveness of protective systems.